PETITION FEE
Under 37 CFR 1.17(f), (g) & (h)
TRANSMITTAL
(Fees are subject to annual revision)

Send completed form to: Commissioner for Patents
P.O. Box 1450, Alexandria, VA 22313-1450

Application Number	**10/784,999**
Filing Date	**February 25, 2004**
First Named Inventor	**T. IDO, et al**
Art Unit	
Examiner Name	
Attorney Docket Number	**501.43526X00**

Enclosed is a petition filed under 37 CFR §1.102(d) that requires a processing fee (37 CFR 1.17(f), (g), or (h)). **Payment of $ 130.00 is enclosed.**

This form should be included with the above-mentioned petition and faxed or mailed to the Office using the appropriate Mail Stop (e.g., Mail Stop Petition), if applicable. For transmittal of processing fees under 37 CFR 1.17(i), see form PTO/SB/17i.

Payment of Fees (small entity amounts are NOT available for the petition (fees)

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Petition Fees under 37 CFR 1.17(f):   **Fee $400**   **Fee Code 1462**
For petitions filed under:
§ 1.53(e) - to accord a filing date.
§ 1.57(a) - to according a filing date.
§ 1.182 – for decision on a question not specifically provided for.
§ 1.183 – to suspend the rules.
§ 1.378(e) for reconsideration of decision on petition refusing to accept delayed payment of maintenance fee in an expired patent.
§ 1.741(b) – to accord a filing date to an application under §1.740 for extension of a patent term.

Petition Fees under 37 CFR 1.17(g):   **Fee $200**   **Fee code 1463**
For petitions filed under:
§1.12 - for access to an assignment record.
§1.14 - for access to an application.
§1.47 - for filing by other than all the inventors or a person not the inventor.
§1.59 - for expungement of information.
§1.103(a) - to suspend action in an application.
§1.136(b) - for review of a request for extension of time when the provisions of section 1.136(a) are not available.
§1.295 - for review of refusal to publish a statutory invention registration.
§1.296 - to withdraw a request for publication of a statutory invention registration filed on or after the date the notice of intent to publish issued.
§1.377 – for review of decision refusing to accept and record payment of a maintenance fee filed prior to expiration of a patent.
§1.550(c) – for patent owner requests for extension of time in <u>ex parte</u> reexamination proceedings.
§1.956 – for patent owner requests for extension of time in <u>inter partes</u> reexamination proceedings.
§ 5.12 – for expedited handling of a foreign filing license.
§ 5.15 – for changing the scope of a license.
§ 5.25 – for retroactive license.

Petition Fees under 37 CFR 1.17(h):   **Fee $130**   **Fee Code 1464**
For petitions filed under:
§1.19(g) – to request documents in a form other than that provided in this part.
§1.84 – for accepting color drawings or photographs.
§1.91 – for entry of a model or exhibit.
§1.102(d) – to make an application special.
§1.138(c) – to expressly abandon an application to avoid publication.
§1.313 – to withdraw an application from issue.
§1.314 – to defer issuance of a patent.

Name (Print/Type)	**Carl I. Brundidge**	*Registration No. (Attorney/Agent)*	**29,621**
Signature		*Date*	**June 23, 2005**

501.43526X00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: T. IDO, et al

Serial No.:   10/784,999

Filed: February 25, 2004

STORAGE SYSTEM, BACKUP SYSTEM AND BACKUP METHOD

PETITION TO MAKE SPECIAL
UNDER 37 CFR 1.102(d) and MPEP. §708.02, VIII

MS Petition
Commissioner for Patents   June 23, 2005
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

1. Petition

Applicants hereby petition to make this application **Special**, in accordance with 37 CFR §1.102(d) and MPEP 708.02, VIII. The present invention is a new application filed in the United States Patent and Trademark Office on February 25, 2004 and as such has not received any examination by the Examiner.

2. Claims

Applicants hereby represent that all the claims in the present application are directed to a single invention. If upon examination it is determined that all the claims presented are not directed to a single invention, Applicants will make an election without traverse as a prerequisite to the granting of special status in conformity with established telephone restriction practice.

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3. Search

Applicants hereby submit that a pre-examination search has been made by a professional searcher.

The field of search covered:

Class	Subclasses	Description
707/		DATA PROCESSING: DATABASE AND FILE MANAGEMENT OR DATA STRUCTURES
	202	·· Recoverability
	204	·· Archiving or backup
709/		ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MULTICOMPUTER DATA TRANSFERRING OR PLURAL PROCESSOR SYNCHRONIZATION
	201	· Distributed data processing
711/		ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MEMORY
	114	···· Arrayed (e.g., RAIDs)
	161	·· Archiving
	162	··· Backup
714/		ERROR DETECTION/CORRECTION AND FAULT DETECTION/RECOVERY
	6	····· Redundant stored data accessed (e.g., duplicated data, error correction coded data, or other parity-type data)

The above subclasses represent areas deemed to contain subject matter of interest to one or more of the search features. Please note that relevant references may be classified outside of these areas. The integrity of the search is based on the records as presented to us by the United States Patent and Trademark Office (USPTO). No further integrity studies were performed. Also a key word search was performed on the USPTO full-text database including published U.S. patent applications.

4. Copy of References

A listing of all references found by the professional searcher is provided by a Form PTO-1449 and copies of the references and the Form PTO-1449 are submitted as part of an Information Disclosure Statement (IDS) filed on even date.

U.S. Patent Number	Inventors
5,544,347	Yanai et al
6,643,667	Arai et al

U.S. Patent Application Publication No.	Inventor(s)
2004/0010732	Oka
2004/0044744	Grosner et al
2004/0073675	Honma et al
2004/0078419	Ferrari et al

5. Detailed Discussion of the References and Distinctions Between the References and the Claims

Below is a discussion of the references uncovered by the search and cited in the IDS filed on even date that appear to be most closely related to the subject matter encompassed by the claims of the present application, and which discussion particularly points out how Applicants' claimed subject matter is distinguishable over those references. All other references uncovered by the search and cited in the IDS filed on even date are **not** treated in detail herein.

a. Detailed Discussion of the References

Yanai et al. (U.S. Patent No. 5,544,347), provides for a Data Storage System Controlled Remote Data Mirroring with Respectively Maintained Data Indices. Disclosed as per Fig. 1 is a system that controls storing of primary data received from a

primary host computer 12 on a primary data storage system 14 and controls the copying of the primary data to a secondary data storage system controller 44 which forms part of a secondary data storage system 46 without intervention from the primary host computer 12. Once the primary data has been received or stored on the secondary data storage system 46, the secondary data storage system controller 44 provides an indication of receipt to the primary data storage system 14. High speed, point-to-point communication links between the primary and secondary data processing system controllers 16 and 44 are included (see Fig. 1; and column 2, lines 38-44).

Arai et al. (U.S. Patent No. 6,643,667 B1), provides for a System and Method for Replicating Data. Disclosed is a split pair button 1514 that allows a user to copy the contents of a source logical volume to a target logical volume in a pair. A re-sync pair button 1515 enables a user to re-synchronize pairs (see Fig. 11A; and column 10, lines 21-24).

Oka (U.S. Patent Application Publication No. 2004/0010732 A1), provides for a Backup Method and Storage Control Device using the Same. Discussed is a backup method for a storage control device that instructs a storage device 103 to split a primary volume 111 and a copy volume 112 in the storage device 103 and to execute a backup operation from the copy volume to a backup volume (5). When batch tasks for copy volume 112 are completed, a differential copy is performed between the volumes 111, 112 and primary volume 111 and copy volume 112 are put in a linked state (duplex state). After the pair-linking operation, an operation is performed to make the contents of the primary volume 111 and the copy volume 112 consistent (see Fig. 2; abstract; and paragraphs 27, 28).

Grosner et al. (U.S. Patent Application Publication No. 2004/0044744 A1)

provides for a Switching System. Disclosed is an application that supports Network Data Management Protocol (NDMP) and allows serverless backup. The application allows users the ability to backup disk devices to tape devices without a server intervening (see paragraphs 153 and 154).

b.   Distinctions Between the References and the Claims

1.   Claimed Invention

The present invention as recited in the claims is not taught or suggested by any of the above noted references whether taken individually or in combination with each other or in combination with any of the other references now of record.

The present invention as recited in the claims is directed to a storage system including a first storage unit for storing information from a first server, a second storage unit for storing the information stored in the first storage unit, and a storage controller coupled with the first storage unit, the second storage unit, the first server, and the second server and being used to control the first and second storage units. According to the present invention, when an instruction for splitting is received from the first server, the storage controller reports an end of the splitting to the first server, receives an instruction for backup from the second server and then transfers information to a backup device from the second storage unit after copying information from the first storage unit to the second storage unit ends.

2.   Distinct Features of Claimed Invention

It is submitted that the cited references, whether taken individually or in combination with each other, fail to teach or suggest the invention as claimed. In

particular, the cited references, at a minimum, fail to teach or suggest in combination with the other limitations recited in the claims:

a first feature of the present invention as recited in independent claim 1, wherein an instruction for splitting is received from a first server, the storage controller reports end of the splitting to the first server, receives an instruction for backup from the second server, and then transfers information to a backup device from the second storage unit after copy of information from the first storage unit to the second ends;

a second feature of the present invention as recited in independent claim 5, including steps of causing a first server to issue an instruction for splitting to the storage controller, then causing the storage controller to report end of the splitting to the first server and then, when an instruction for backup is received from the second server, transferring information from the second storage unit to a backup device after end of copy of the information from the storage unit to the second storage unit;

a third feature of the present invention as recited in independent claim 9, wherein when the storage controller receives an instruction for splitting from the servers, end of splitting is reported to the servers, an instruction for backup is received from the servers, then information is copied from the first storage units into the second storage unit, and after the end thereof the information is transferred from the second storage unit to the backup device; and

a fourth feature of the present invention as recited in independent claim 14, wherein a first control portion connected with the memory accepts splitting processing sent from a first server and reports end of splitting to the first server, and a second control portion connected with the memory accepts backup processing

sent from a second server after the report of end of the splitting.

To the extent applicable to the present Petition, Applicants submit that although the distinguishing feature(s) may represent a substantial portion of the claimed invention, the claimed invention including said feature(s) and their inter-operation provides a novel storage system and system and method related to or implemented in or by said storage system not taught or suggested by any of the references of record.

3. Distinctions Between Claimed Invention and References

The references considered most closely related to the claimed invention are briefly discussed below:

Yanai as described above simply discloses a data storage system that controls storing of primary data received from a primary host computer on a primary data storage system and controls the copying of the primary data to a secondary storage controller which forms part of a secondary storage system without intervention from the primary host computer. However, at no point is there any teaching or suggestion in Yanai of the above described features of the present invention as recited in the claims wherein, when an instruction for splitting is received from the first server, the storage controller reports an end of the splitting to the first server, receives an instruction for backup from the second server and then transfers information to a backup device from the second storage unit after copying information from the first storage unit to the second storage unit.

More particularly, Yanai does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above

described second feature of the present invention as recited in independent claim 5, the above described third feature of the present invention as recited in independent claim 9, and the above described fourth feature of the present invention as recited in independent claim 14 in combination with the other limitations recited in each of the independent claims.

Arai teaches a system and method wherein a pair split button is provided that allows a user to copy the contents of a source logical volume to a target logical volume and re-sync pair button enables a user to re-synchronize the pairs.

However, at no point is there is any teaching or suggestion in Arai of the above described features of the present invention as recited in the claims, wherein an instruction for splitting is received from a first server, the storage control reports an end of the splitting to the first server, receives an instruction for backup from the second server and then transfers information to a backup device from the second storage unit after copying from the first storage unit to the second storage unit.

More particularly, Arai does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 5, the above described third feature of the present invention as recited in independent claim 9, and the above described fourth feature of the present invention as recited in independent claim 14 in combination with the other limitations recited in each of the independent claims.

Oka as described above provides a backup method for a storage device that instructs a storage device to split a primary volume and a copy volume to execute a backup operation from the copy volume to the backup volume. However, at no point

is there any teaching or suggestion in Oka of the above described features of the present invention as recited in the claims wherein, when an instruction for splitting is received from a first server, the controller reports an end of the spitting to the first server, receives an instruction for backup from the second server and then transfers information to a backup device from the second storage unit after copying information from the first storage unit to the second storage unit.

More particularly, Oka does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 5, the above described third feature of the present invention as recited in independent claim 9, and the above described fourth feature of the present invention as recited in independent claim 14 in combination with the other limitations recited in each of the independent claims.

Grosner as described above discloses an application that supports in the MP and allows users the ability to backup disk devices to tape devices without a server intervening.

However, at no point is there any teaching or suggestion in Grosner of the above described features of the present invention as recited in the claims wherein, when an instruction for splitting is received from the first server, the storage controller reports an end of the splitting to the first server, receives an instruction for backup from the second server and then transfers information to a backup device from the second storage unit after copying information from the first storage unit to the second storage unit.

More particularly, Grosner does not teach or suggest the above described

first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 5, the above described third feature of the present invention as recited in independent claim 9, and the above described fourth feature of the present invention as recited in independent claim 14 in combination with the other limitations recited in each of the independent claims.

Therefore, since the cited references fail to teach or the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 5, the above described third feature of the present invention as recited in independent claim 9 and the above described fourth feature of the present invention as recited in independent claim 14, it is submitted that all of the claims are patentable over the cited references whether said references are taken individually or in combination with each other.

6.   Conclusion

Applicant has conducted what it believes to be a reasonable search, but makes no representation that "better" or more relevant prior art does not exist. The United States Patent and Trademark Office is urged to conduct its own complete search of the prior art, and to thoroughly examine this application in view of the prior art cited herein and any other prior art that the United States Patent and Trademark Office may locate in its own independent search. Further, while Applicant has identified in good faith certain portions of each of the references listed herein in order to provide the requisite detailed discussion of how the claimed subject matter

is patentable over the references, the United States Patent and Trademark Office should not limit its review to the identified portions but rather, is urged to review and consider the entirety of each reference, and not to rely solely on the identified portions when examining this application.

In view of the foregoing, Applicant requests that this Petition to Make Special be granted and that the application undergo the accelerated examination procedure set forth in MPEP 708.02 VIII.

7.   Fee (37 C.F.R. 1.17(i))

The fee required by 37 C.F.R. § 1.17(i) is to be paid by:

[X]   the Credit Card Payment Form (attached) for $130.00.

[ ]   charging Account _____ the sum of $130.00.

A duplicate of this petition is attached.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (501.43526X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.

Carl I. Brundidge
Registration No. 29,621

CIB/jdc
Enclosures